



liability; negligence; and breach of warranty.<sup>1</sup> The contested liability and expert issue in this matter is whether the fire originated in the wood cabinets above the microwave due to damage sustained to the power cord during installation (LG's position) or whether the fire originated inside the microwave due to a design or manufacturing defect (Plaintiff's position).

Plaintiff has focused on the product liability theory and alleges that the microwave had a design defect that caused the fire and related property damage. To support its erroneous product liability theory, Plaintiff proffers expert opinion testimony from Gregory L. Booth, P.E.<sup>2</sup> Booth's proffered opinion is that the microwave was defectively designed because it lacked power surge protection against inevitable power quality or transient voltage, as supplied by the third-party local electrical utility.<sup>3</sup>

LG moves for summary judgment as Plaintiff cannot meet its burden to prove that the microwave was defective and caused the fire.<sup>4</sup> LG's motion is premised on the admissibility and reliability of Plaintiff's expert. Booth's proffered opinions must be precluded as they fail to meet

---

<sup>1</sup> See, Plaintiff's Amended Complaint, Document 37 on the Docket.

<sup>2</sup> Booth produced an original report, dated November 15, 2013 ("Original Report"), and a supplemental report, dated December 4, 2013 ("Supplemental Report"), attached hereto as Exhibit "A" and Exhibit "B", respectively. Exhibit "B" includes Booth's resume and Rule 26(a)(2) disclosures. Booth's deposition was completed on February 19, 2014. See, Booth's deposition transcript attached hereto as Exhibit "C".

<sup>3</sup> The Institute of Electrical and Electronics Engineers ("IEEE"), IEEE 1100 2.2.83, defines transient voltage as "[a] sub cycle disturbance in the ac waveform that is evidenced by a sharp, brief discontinuity of the waveform. May be of either polarity and may be additive to, or subtractive from, the nominal waveform." Thus, if a voltage goes above or below a certain wavelength standard for less than one cycle (which equals 16 thousandths of a second), it is called a transient.

<sup>4</sup> To prove strict liability in Pennsylvania under a theory of defective design, a plaintiff must prove: (1) that the product was defective; (2) that the defect existed when it left the manufacturer's control; and (3) that the defect caused the plaintiff's harm. See, *Barnish v. KWI Bldg. Co.*, 602 Pa. 402, 980 A.2d 535, 541 (Pa. 2009).

the requisite admissibility standards regarding whether the expert is qualified,<sup>5</sup> and whether the testimony meets the two requirements of Fed.R.Evid. 702, *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S. Ct. 2786 (1993) and *Kuhmo Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 119 S. Ct. 1167 (1999) that: (1) the methodology underlying the testimony is valid and (2) the opinion will be helpful to the jury.

Significantly, Booth's proffered opinions are not supported by reliable methodology or objective testing. Rather, he makes numerous subjective assumptions based solely on his knowledge and experience in the power distribution industry, which renders his opinion *ipse dixit* and unreliable.<sup>6</sup> First, Booth's opinion is premised on the hypothesis that transient voltage damaged the microwave's internal components. Booth failed, however, to obtain readily available data from the local electrical utility (that he admits exists), which would have proven (or disproven) the presence and frequency of transient voltage supplied to the Boicu's home during the two years and four months that the Boicu's used the microwave without incident. Without this data, the transient voltage that Booth claims damaged the internal components is unproven speculation that exists according to Booth, simply "because I said so."<sup>7</sup>

---

<sup>5</sup> LG does not directly challenge Booth's qualifications as an electrical engineer, but notes that he has considerable experience defending utility companies in matters involving power quality distribution issues. Exhibit "C", pp. 32-33. His resume also identifies over 260 utility companies and municipalities that retained him as an expert or consultant. Based on his knowledge and experience, it is obvious that Booth's expertise involving electrical utilities and power quality issues leads to an unduly biased and unreliable presumption (regardless of the applicable industry standards) that all household appliance and electronic products would be safer if they had internal surge protection from the inevitable supply of external transient voltage.

<sup>6</sup> *Ipse dixit* is a Latin phrase meaning "something asserted but not proved" or commonly referred to as "because I said so." Black's Law Dictionary 833 (7th Ed. 1999). An expert's opinion cannot be based on unsupported speculation. See, *Johnson v. SJP Mgmt. LLC*, 2009 WL 367539 (E.D.Pa. Feb. 12, 2009).

<sup>7</sup> See, *Pappas v. Sony Elecs., Inc.*, 136 F.Supp.2d 413, 426 (W.D.Pa. 2000) ("If *Daubert* and its progeny require anything, it is that plaintiffs come forward with proof of a valid methodology based on more than just the *ipse dixit* of the expert.")

Second, Booth's opinion is that a surge protection device would have prevented damage to internal components, which ultimately failed and caused the fire. Booth, however, never tests the validity of his proffered opinion on an exemplar microwave to determine: (1) if he can re-create his theory of the fire - for example, if transient voltage (and at what frequency level) can damage the internal components to the extent that they malfunction and create a fire; (2) which type of power surge devices may prevent damage to the internal components; and (3) where the devices may be incorporated within the microwave to be effective. Moreover, despite arriving at testable hypotheses, Booth had the opportunity to test internal components and power cords in exemplar microwaves - but he failed to do so.

For example, Booth claims that the power cord could not have started the fire, but he fails to test any exemplar cords to determine its ability to arc through damaged insulation or to determine the necessary level of damage that would be required to produce an arc in an exemplar cord before reaching his conclusion.<sup>8</sup> Booth's failure to complete any testing whatsoever renders his opinion inadmissible and unreliable under *Daubert*. See, *Oddi v. Ford Motor Co.*, 234 F.3d 136 (3d Cir. 2000); *Booth v. Black & Decker, Inc.*, 166 F.Supp.2d 215, 221-23 (E.D.Pa. 2001); *Chester Valley Coach Works, Inc. v. Fisher-Price, Inc.*, 2001 WL 11660012 (E.D.Pa. Aug. 29, 2001); and *Maldonado v. Walmart Store No. 2141*, 2011 WL 1790840 (E.D.Pa. May 10, 2011) (all holding under *Daubert*, that the plaintiffs' experts' opinions are fatally flawed and inadmissible as unreliable because the experts' hypotheses were never tested).

---

<sup>8</sup> Despite claiming that he uses "[t]he entire document" of NFPA 921 to rule out the power cord as a source of the fire, he conveniently ignores the sections discussing the ability of damaged insulation to actually turn into a conductor. Exhibit "C", p. 79, ll. 2-5. See, NFPA 921 § 8.9.4, entitled *Arcs*, discussed below on pp. 13-15, and attached hereto as Exhibit "N". "Arcing between two conductors separated by a solid insulator can become possible if the insulator becomes carbonized . . . by flow of electric current." Exhibit "N", ¶ 8.9.4.5.

Third, due to a lack of experience with residential appliance design, Booth relies on irrelevant and misleading industry standards (ASTM, UL and IEEE) and a few unsubstantiated and unverified prior consumer complaints posted on a U.S. Consumer Products Safety website that have no application to the residential microwave at issue, Model LMV2053ST. His reliance upon inapplicable standards and unverified complaints makes his methodology inadmissible and unreliable under Fed.R.Evid. 702 and *Daubert*.

Finally, Booth's proffered defect theory opinion fails the requirement that an expert's testimony be helpful and "fit" the facts of the case. Indeed, to the extent Booth's overly broad theory has any application at all to the residential microwave and subject fire, it should rather be properly aimed at the third-party local electrical utility provider, as opposed to LG. Again, Booth claims that the transient voltage could have occurred at any time over a nearly 2 ½ year period without even bothering to obtain and review readily available information from the local electrical utility, which could have proven (or disproven) his theory. Accordingly, Booth did not investigate the existence of potentially unreasonably dangerous and defective voltage disturbances that may have damaged the microwave over a nearly 2 ½ year period due to the negligence or product liability issues related to the local electrical utility or third-parties somehow affecting the power supply.<sup>9</sup>

Accordingly, the Court must preclude Booth's proffered opinions as inadmissible and unreliable under Fed.R.Evid. 702 and *Daubert* and grant summary judgment in LG's favor.

---

<sup>9</sup> Pennsylvania recognizes product liability as a cognizable cause of action against a utility company if electricity "in a defective condition, unreasonably dangerous" passes through the meter of a user or consumer and into the stream of commerce, causing physical harm to the ultimate user or consumer, or to his property. *See, State Farm Fire & Cas. Co. v. PECO*, 2012 Pa. Super. 212, 54 A.3d 921, 930 (2012) citing *Schriner v. Pa. Power & Light Co.*, 348 Pa. Super. 177, 501 A.2d 1128 (1985).

## **II. FACTUAL BACKGROUND**

### **A. Allstate's Subrogation Claim**

This property damage subrogation claim arises from a fire that occurred on January 24, 2011, and undisputedly originated in the vicinity of the microwave. The microwave was installed around September 2008. See, Florentina Boicu's deposition transcript, p. 8, ll. 1-9; p. 10, ll. 19-21, attached hereto as Exhibit "D"; Basile Boicu's deposition transcript, p. 15, ll. 17-23, attached hereto as Exhibit "E". The microwave had never malfunctioned and had not been used the day before or the morning of the fire. Exhibit "D", p. 10, l. 21 - p. 11, l. 14; Exhibit "E", p. 26, l. 10 - p. 27, l. 1.

Around 6 a.m. on January 24, 2011, Mrs. Boicu was leaving for work when she realized that she forgot her work bag. Exhibit "D", p. 13, ll. 6-14. She smelled smoke as she re-entered the house. Exhibit "D", p. 13, ll. 15-20. She went upstairs and woke her husband, who went downstairs to the furnace area. Exhibit "D", p. 14, ll. 9-20. Mrs. Boicu then entered the kitchen area and saw a lot of smoke and some sort of light around the vicinity of the microwave and the cabinets above. Exhibit "D", p. 14, l. 21 - p. 15. Shortly thereafter, Mr. Boicu entered the kitchen area and saw a lot of smoke in the vicinity of the microwave and a little bit of light that appeared to be inside or near the rear of the microwave. Exhibit "E", p. 32, l. 14 - p. 33. Mr. Boicu opened the cabinet doors above the microwave and flames erupted. Exhibit "E", p. 34, ll. 1-13. Mr. Boicu never observed flames inside the microwave. Exhibit "E", p. 33, ll. 7-25. The Boicus then exited the home and did not re-enter until after the fire department extinguished the fire. Exhibit "D", p. 22, l. 21 - p. 23, l. 6; Exhibit "E", p. 43, ll. 19-21.

By way of background, around September 2008, the Boicus remodeled their kitchen. Exhibit "D", p. 10, ll. 15-21; Exhibit "E", p. 15, ll. 1-2. They could not recall from which store

they purchased the microwave. Exhibit “D”, p. 8, ll. 3-23; Exhibit “E”, p. 16; ll. 2-17. The Boicus hired defendant Heffleger Kitchen Center to design and construct the kitchen cabinets and counters. Exhibit “D”, p. 9, ll. 3-8; p. 30, l. 23 - p. 31, l. 9. The Boicus hired defendant A-1 Electrical to install the wiring and outlet in the cabinet above the microwave. Exhibit “E”, p. 19, l. 21 - p. 20, l. 4. While the microwave was undisputedly installed in September 2008, there is conflicting testimony between Heffleger, A-1 Electrical and the Boicus regarding who actually installed it. Robert Oplinger, the owner of A-1 Electrical, testified that during his third visit to the residence, Mr. Boicu informed him that he himself installed the microwave. See, Oplinger’s deposition transcript, p. 54, l. 19 - p. 55, l. 7, attached hereto as Exhibit “F”.

The method and manner in which the installation occurred is significant, as LG’s investigation confirmed that the only identifiable electrical damage was located on the external power cord portion, some 22 inches outside of the microwave unit and contained within the wooden cabinets above the microwave.<sup>10</sup> Although LG has no obligation to identify the cause of the fire and the legal burden for proving the same rests entirely with the Plaintiff, LG’s engineering expert, Richard Kovarsky, P.E., asserts that the power cord was damaged during installation and eventually failed and arced thereby causing the wood cabinets above the microwave to ignite. See, Kovarsky’s expert reports, dated May 25, 2011 and December 12, 2013, attached hereto as Exhibit “G” and Exhibit “H”, respectively.

#### **B. Gregory Booth’s Proffered Opinions**

Booth’s proffered opinion is that the “LG microwave oven Model LMV2053 was defective in that it lacked overvoltage protection to prevent a fire event occurring if voltage

---

<sup>10</sup> Booth acknowledges that all three conductors in the power cord external to the microwave and located around 22” outside of the housing showed signs of electrical activity. See, Exhibit “B”, p. 5. This is the only observed electrical activity ever associated with the microwave.



transients are present.” Exhibit “B”, p. 9 (emphasis added). More specifically, Booth’s two fire-causing scenarios are: (1) most likely, a microwave internal component failed due to periodic transient voltage causing the microwave to self-start, overheat with no ability to turn-off and then start a fire; or (2) less likely, an internal component failed causing an arcing event that generated enough heat to start the fire within the microwave. See, Exhibit “C”, p. 113, l. 16 - p. 115, l. 16; p. 124, l. 6 - p. 125, l.1; pp. 165-66. Thus, both of Booth’s fire causing scenarios are dependent on the presence of transient voltage and the hypothesis that, if a surge protection device was designed into the microwave, the fire would not have occurred.

**i. Booth Has No Reliable Source of Transient Voltage That Allegedly Damaged the Internal Components of the Subject Microwave**

Booth’s Original Report cited a photograph showing an electrical utility transformer arcing event on a telephone pole in support for his “power surge” theory. Mistakenly believing that the telephone pole and transformer were located in the vicinity of the Boicu’s home at the time of the fire, Booth relied on the photograph as evidence that a power surge was the origin of the Boicu’s fire. Subsequently learning that the photograph and the transformer were completely unrelated to the Boicu’s fire and mistakenly provided by the fire department’s photographer, Booth removed this evidence and related inferences from his Original Report. See, letter from Plaintiff’s counsel to all counsel, dated November 26, 2013, attached hereto as Exhibit “I”.

The following is an excerpt from the Original Report that was removed in the Supplemental Report:



Photograph No. 10 appears to have been taken during the time the fire department was at the location and indicates the primary lead on the transformer in the nearby vicinity was arcing back to the pole. If this transformer was near the house where the fire was located, it could have caused transient voltage to be introduced onto the power line serving the Boicu residence. Electronic equipment, like the circuit board controls within the microwave oven, does not tolerate such transient conditions and the internal components can sustain damage due to voltage transients.



*Photograph No. 10*

See, Exhibit “A”, p. 7. The only other difference between the two reports is the removal of the following sentence: “Since there is no overvoltage protection in this microwave, the problem with the power company’s transformer could have generated voltage transients that damaged the microwave circuit control board which led to the fire.” See, Exhibit “A”, p. 8.

Despite the loss of this key piece of evidence, Booth’s findings and opinions in the Original Report and the Supplemental Report are identical. Booth’s concession that the photograph was erroneous and that any related reference and inferences must be removed is significant, as the likely source of transient voltage - the arcing transformer - no longer exists.<sup>11</sup> Incredibly, the elimination of the transformer as a possible source of transient voltage did not affect his opinion, as Booth’s “opinion and findings are completely independent of the precise source of overvoltage condition.” Exhibit “C”, p. 154, ll. 12-18.

With respect to the existence of transient voltage at the time of the fire, Booth admits that “[w]e have no evidence that one [transient voltage] existed or didn’t exist at the time of the fire.” Exhibit “C”, p. 155, ll. 2-10. Booth claims that the overvoltage could have occurred at any time

---

<sup>11</sup> Significantly, the photograph is an example regarding how the electrical utility or a third-party’s negligence or defective product could have damaged the microwave’s internal components (per Booth’s theory) over a nearly 2 ½ year period.

over the last two years and four months, but the unidentified component failed on the date of the fire. Exhibit "C", p. 125, ll. 3-15. Booth then admits that, despite readily available data from the local electrical utility supplier, FirstEnergy System, potentially confirming the frequency of transient voltage at the substation servicing the Boicu's residence, Booth did not obtain this information or complete the overvoltage analysis. Exhibit "C", p. 125, ll. 16-18.

Booth, instead, relies on his unrelated and prior analyses, studies and testimony completed on behalf of FirstEnergy's electrical distribution systems throughout Virginia, Pennsylvania, Ohio and New Jersey, to support his speculative theory that at least once per year the Boicu's residence will experience transient overvoltage whether through lightning strikes or the general operation of the electric utilities' distribution system. Exhibit "C", pp. 155-160.

More specifically:

Q. Have you personally studied FirstEnergy's electric grid in the area that serves the Boicu residence?

A. I'm sure I have. **I didn't associate it with this accident. I just relied on my years of studies** I've done in Pennsylvania and New Jersey with FirstEnergy System.

Q. Does FirstEnergy have data that would document surges?

A. They would have data that would document overvoltage, and they would have data that would document lightning surges.

Q. And how close to the Boicu residence -- if you wanted to obtain that from FirstEnergy, how would you ask applicable to the Boicu residence?

A. I would ask -- I would identify the substation in the circuit and ask for their data on both lightning strikes and on all their equipment and voltage measurements on the circuit.

Q. Do you know what substation -- would it have a name? Do you know what substation serves this residence?

A. **I haven't done that analysis.**

Exhibit "C", pp. 159-60 (emphasis added).

**ii. Booth Repeatedly References Irrelevant and Inapplicable Industry Standards in Support of His Proffered Opinion**

Despite his experience and knowledge in electrical utility distribution field, Booth admits that he cannot recall ever having experience in the design or manufacture of a residential microwave. Exhibit “C”, p. 19, ll. 2-22. This is significant because he is not familiar with the applicable industry standards. Thus, it is of little surprise that he repeatedly applies irrelevant, misleading standards that have no application to the design of residential microwaves in support of his theory that the subject microwave was required to have surge protection.

For example, Booth cites ASTM Standard F1360-06, entitled “*Standard Specification for Ovens, Microwave, and Electric*”, which provides as follows:

*7.4.2 Surge Voltage Protection—when specified (see 5.1), protection shall be provided for surge voltages experienced in low-voltage (120 and 240 vac) indoor alternating current power circuits as defined in ANSI C62.41, paragraphs 5.3 and 5.3.1. Protection shall be provided for oven semiconductor circuits from surge voltages origination from source defined in ANSI C62.41, Section 3, for the waveshape described in 5.3.1, Fig. 2 (0.5  $\mu$ s – 100 Hz ring wave (open circuit voltage)).*

Exhibit “B”, p. 7. This standard, however, expressly applies to commercial microwaves. See, ASTM Standard F1360-06, attached hereto as Exhibit “J”. Booth admits that the microwave at issue is for residential use, not commercial. Exhibit “C”, p. 136, ll. 8-11. Booth admits that he should have included United Laboratories, UL 923, *Microwave Cooking Appliances*, and the IEEE standards in his Supplemental Report to support his proffered opinion that all appliance manufacturers understand that voltage suppression is required. “If I didn’t, it would have been good to put it in here . . . .”<sup>12</sup> Exhibit “C”, p. 110, ll. 8-9.

---

<sup>12</sup> Fed.R.Civ.P. 26(a)(2)(B) requires expert’s reports to contain a “complete statement of all opinions the witness will express and the basis and reasons for them.”

During his deposition, for the first time, Booth mentions that UL 923, paragraphs 4.3 and 28.1, require surge protection for residential microwaves. Exhibit “C”, p. 132. However, a cursory evaluation shows that the cited UL 923 paragraphs were only added in the UL 923, Seventh Edition, dated May 1, 2013, and were not present in the UL 923, Fifth Edition, dated May 23 2002, which was in effect when LG designed and manufactured the subject microwave. See, e.g., Exhibit “K” comparing language of UL 923, Fifth Ed. versus UL 923, Seventh Ed.

As further evidence that Booth’s reference to UL 923 is entirely misplaced, LG had already obtained UL certification for the microwave model at issue, LMV2053ST, in July 2005. Thus, the subject microwave complied with all applicable and contemporary UL 923 requirements and Booth is revealed as unqualified and incompetent on the issue of UL standards and certifications pertinent to residential microwaves, such as the LG model at issue. See, UL compliance certification attached hereto as Exhibit “L”.

Moreover during his deposition, for the first time, Booth mentions that IEEE C62.41, IEEE 242 and IEEE 1584 discuss surge voltages to support his opinion that surge protection is required in residential microwaves. Exhibit “C”, p. 101, ll. 9-22; p. 116, ll. 2-19; p. 134, ll. 6-20. A cursory examination, however, shows that IEEE C62.41 (surge protection for low voltage AC power circuits), IEEE 242 (recommended practice for protection and coordination of industrial and commercial power systems) and IEEE 1584 (guide for performing arc flash hazard calculations) have no application to residential microwaves and are irrelevant and misleading. See, Richard Kovarsky’s Deposition Transcript, p. 141, ll. 18 - p. 143; ll. 1-6, attached hereto as Exhibit “M”. Indeed, the IEEE standards discuss power quality issues and contain

recommendations from people that are directly involved in the management and design of electrical distribution systems, not the design and manufacture of residential appliances.<sup>13</sup>

**iii. Booth's Methodology is Unreliable and He Fails to Complete any Testing Whatsoever**

Booth testifies that his methodology of investigating the source and cause of the fire is rooted in the National Fire Protection Association, NFPA 921, and his 50 years of training in forensic analysis. Exhibit "C", p. 78. Booth's NFPA 921 analysis involved including and excluding all possible sources of the fire related to the microwave. Booth then eliminates LG's theory that the power cord was the source of the fire.

Booth testifies that NFPA 921, plus all of his training and studies dealing with the distance that electricity can arc through air between conductors (copper wires) absent direct contact, was a "major component" of his evaluation. Exhibit "C", p. 79, ll. 2-17. Booth cites NFPA 921 then claims that the conductors in the power cord must essentially be touching or within 0.0004 inches to arc and that the power cord could not have been sufficiently damaged to allow the bare conductors to be that close. Exhibit "C", p. 99, l. 5 - p. 106, l. 19.

Booth, however, completely ignores prior authoritative studies and a treatise that confirms arcing through insulation, in fact, occurs and is a viable source of the fire. For example, NFPA 921 § 8.9.4.5, *et seq.* discusses arcing across a carbonized path and arc tracking with references to studies showing that damaged insulation on 120/240 volt alternating current

---

<sup>13</sup> Under Pennsylvania law, non-mandatory industry standards and customs are generally inadmissible as evidence of defect under a theory of strict products liability. *See, Blacker v. Oldsmobile Div., General Motors Corp.*, 869 F.Supp 313 (E.D.Pa. 1994) citing *Lewis v. Coffing Hoist*, 528 A.2d 590 (Pa. 1987) (ASHE standards, despite customary use in the industry, were inadmissible on the issue of defect where silent on the specific definition of defective design or manufacture); *Majdic v. Cincinatti Machine Co.*, 537 A.2d 334 (Pa. Super. 1988) (ANSI standards are inadmissible in products case); *See also, Sheehan v. Cincinnati Shaper Co.*, 382 Pa. Super. 579, 584 (1989) (OSHA regulations are inadmissible in products case).

systems can allow arcing between two conductors separated by a solid insulator. See, NFPA 921, § 8.9.4, *et seq.*, entitled *Arcs*, attached hereto as Exhibit “N”.

After ruling out the power cord as a potential source of the fire, Booth then evaluates the microwave at issue. Booth could not specifically identify any internal component part that failed, as he claimed that the failed part was likely destroyed by the fire. Exhibit “C”, p. 107, l. 5 - p. 109, l. 4. He then simply visually examines two exemplar microwaves and determines that they lack surge protection. Exhibit “C”, p. 109, ll. 5-15; p. 111, ll. 10-16. Without any independent testing whatsoever, he then concludes, based on his prior and unrelated experience and knowledge, that transient voltage could have damaged the internal components of the microwave over the nearly 2 ½ year period when the microwave was installed up through the time of the fire.

Booth then makes a blind leap away from the possibility that any particular component part may have directly failed unrelated to power quality issues, and rather claims that transient voltage has to be the cause of the component part failure and resultant fire. For example:

Q. But, also, there’s **other potential sources** that are the potential origin of the problems complained about, right, **other than surge protection**?

A. **That is correct.** There are an array of discussions here, and **we actually don’t know the scientific analysis that says here’s the precise problem**, but any one of these problems **could have** arisen due to overvoltage conditions creating a malfunction in the unit.

Exhibit “C”, p. 147, ll. 1-12 (emphasis added). Thus, Booth fails to follow NFPA 921 and rule out all possible ignition sources.

Despite his concession of possible sources of the internal malfunction other than transient voltage, Booth admits that he completed no testing whatsoever to support or verify his

hypothesis. Booth admits that he did not test the ability of the power cords to arc. Exhibit “C”, p. 99, ll. 5-8. Booth did not complete testing of the exemplars to determine the level of overvoltage necessary to cause arcing or internal damage to any of the components. Exhibit “C”, pp. 111-12. He claims “I did not because I did not want to destroy them without other experts being there.” Exhibit “C”, p. 111, ll. 21-23.

**iv. Booth Uses Unreliable Information to Support His Hypothesis  
that the Microwave Self-Started**

In the absence of any other objective evidence to support his theory that the subject microwave self-started and created the fire, Booth references the U.S. Consumer Products Safety Commission (“CPSC”) website, <http://saferproducts.gov>, which contains ten to twelve purported consumers’ complaints pertaining to various LG microwaves that allegedly self-started and overheated.<sup>14</sup> Booth repeatedly admits, however, that these consumer complaints are “**not scientifically reliable.**” Exhibit “C”, p. 140, ll. 9-10; p. 145, ll. 3-4; p. 145, ll. 17-18 (emphasis added).

He admits that every single one of these claims contains the following disclaimer: “CPSC does not guarantee the accuracy, completeness, or adequacy of the contents of the Publicly Available Consumer Products Safety Information Database on SaferProducts.gov, particularly with respect to information submitted by people outside of CPSC.” Exhibit “C”, p. 142, l. 18 - p. 143, l. 9. Booth also admits that there is no information that any of these claims were independently verified or investigated. He further admits that he does not know whether these appliances were properly installed, whether they were misused or otherwise abused:

Q. As well as there’s no information on any of these sheets that says these are independently verified, investigated. Is that

---

<sup>14</sup> Significantly, none of the microwaves on the website were the model at issue, LMV2053ST, in this matter.



fair?

A. That is correct.

Q. And we don't know how these were installed, if they were misused, abused or anything of that nature? We don't know the history of the microwaves in each one of these complaints?

A. We do not.

Exhibit "C", 143, ll. 10-20.<sup>15</sup>

Accordingly, Booth's proffered opinions must be precluded as inadmissible and unreliable under Fed.R.Evid. 702 and *Daubert*.

### III. ARGUMENT

#### A. Summary Judgment

Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." Fed.R.Civ.P. 56(c). A "genuine issue" is one in which "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248, 106 S. Ct. 2505, 91 L.Ed.2d 202 (1986). A factual dispute is "material" if it could impact the holding of the case under the governing law. *Id.*

---

<sup>15</sup> Notwithstanding the lack of reliability of the CPSC reports, in *Chester Valley Coach Works v. Fisher-Price, Inc.*, 2001 WL 1160012 (E.D. Pa. Aug. 29, 2001), CPSC and Fisher-Price received around 700 reports regarding electrical component failures and overheating in Bigfoot model Power Wheel products. As a result, Fisher-Price voluntarily recalled the products and modified the electrical system. *Id.* at 10. Plaintiff's sought to recover damages from a fire allegedly caused by the Bigfoot vehicles located at their property. Plaintiff's expert relied upon the CPSC and recall information to support his design defect theory. The court, while acknowledging that this information suggests a design defect, found that plaintiff's expert failed to complete any tests on an exemplar and did not inquire whether any testing was in fact completed. *Id.* at 10. The court precluded the expert's proffered opinion on the basis that the expert "like the expert in *Oddi*, did not test his theories in any way and does not support his conclusions through generally accepted principles or methodologies. Rather, his testimony is simply '*ipse dixit* [and] does not withstand *Daubert's* scrutiny.'" *Id.* at 12.

When deciding a motion for summary judgment, a court must draw all reasonable inferences and view all facts in the light most favorable to the non-moving party. *Id.* at 255; *Hugh v. Butler County Family YMCA*, 418 F.3d 265, 267 (3d Cir.2005) (citations omitted); *see also United States v. Diebold, Inc.*, 369 U.S. 654, 82 S. Ct. 993, 8 L.Ed.2d 176 (1962). A Court may grant summary judgment if it determines that, after reviewing the evidence and making all inferences in favor of the non-moving party, there is no genuine issue of material fact to warrant a trial. *Celotex Corp. v. Catrett*, 477 U.S. 317, 322–23, 106 S. Ct. 2548, 91 L.Ed.2d 265 (1986).

#### **B. The Standard For Admissibility of Expert Testimony**

Federal Rule of Evidence 702 governs expert testimony admissibility and provides that:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

According to the mandate of *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993), it is the responsibility of the trial judge to serve as a “gatekeeper” to ensure that “any and all expert testimony or evidence is not only relevant, but also reliable.” *Kannankeril v. Terminix Int’l, Inc.*, 128 F.3d 802, 806 (3d Cir. 1997). A District Court is granted wide discretion when determining whether to admit or exclude expert testimony. *Hamling v. United States*, 418 U.S. 87, 108, 94 S. Ct. 2887, 41 L.Ed.2d 590 (1974). The proponent of the expert testimony must meet this burden “by a preponderance of proof.” *Oddi*, 234 F.3d at 144; *Daubert*, 509 U.S. at 593.

Rule 702 “embodies a trilogy of restrictions on expert testimony: qualification, reliability and fit.” *Schneider ex rel. Estate of Schneider v. Fried*, 320 F.3d 396, 404 (3d Cir. 2003)

(citations omitted). A trial court must exclude expert testimony that does not meet these three requirements. *Id.* at 404 (citing *Daubert*, 509 U.S. at 592). Here, notwithstanding Booth's unduly bias in favor of electrical utilities and against residential appliances, Booth's proffered opinions must be precluded because they are unreliable and do not fit the facts of this case.

**i. Booth's Opinions are Based on Unreliable Methodology and *Ipse Dixit***

Under the second requirement of Rule 702, "an expert's testimony is admissible so long as the process or technique the expert used in formulating the opinion is reliable." *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 742 (3d Cir. 1994). To be "reliable," the testimony must be based on the "methods and procedures of science," rather than on "subjective belief or unsupported speculation." *Paoli*, 35 F.3d at 744 (citing *Daubert*, 509 U.S. at 590). "The evidentiary requirement of reliability is lower than the merits standard of correctness." *Id.* In other words, a litigant need not prove that an expert's opinions are *correct*, she need only prove that they are *reliable*. Nevertheless, the litigant must make more than a *prima facie* showing that her expert's methodology is reliable in order to meet the "reliability" requirement of Rule 702. *Id.* at 743.

When assessing the "reliability" of an expert's testimony under Rule 702, a court should consider the following: (1) whether the expert's methods consist of a testable hypothesis - whether it can be and has been tested; (2) whether the method has been subject to peer review and publication; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; (5) whether the expert's method is generally accepted; (6) the relationship of the technique used to methods already established to be reliable; (7) the expert's qualifications based on the methodology; and (8) the non-judicial uses to which the method has been put. *Paoli*, 35 F.3d at 742 n. 8; *Pineda v. Ford Motor Co.*, 520 F.3d 237,

247-48 (3d Cir. 2008). This list of factors is “neither exhaustive nor applicable in every case.” *Pineda*, 520 F.3d at 248 (quoting *Kannankeril*, 128 F.3d at 806–07). A court has discretion to consider any other relevant factors as well. *See, Elcock v. Kmart Corp.*, 233 F.3d 734, 746 (3d Cir. 2000).

Expert testimony “must be based on the ‘methods and procedures of science’ rather than on ‘subjective belief or unsupported speculation.’” *Paoli*, 35 F.3d at 742 (quoting *Daubert*, 509 U.S. at 590). For example, in *Oddi v. Ford Motor Co.*, the plaintiff suffered serious injuries when the truck he was driving crashed into a bridge abutment and guardrail, which pierced the truck’s cab floor. *Oddi*, 234 F.3d at 140. Plaintiff sued the manufacturer of the truck, Ford, alleging that the design of the truck’s front bumper was defective because it allowed the underside of the truck to “ramp” onto the guardrail. *Id.* Plaintiff offered the expert testimony of John Noettl, who opined that if the bumper and floor board had been “properly structurally designed,” the truck would not have ramped onto the guardrail, which then would not have been pierced by the floor board. *Id.* at 146-47.

The court precluded Noettl’s proffered testimony based on unreliable methodology under *Daubert* finding that Noettl “used little, if any, methodology beyond his own intuition.” *Id.* at 158. The court cited to Noettl’s failure to conduct any independent tests or calculate any of the forces on plaintiff or the truck during the incident. *Id.* Moreover, the court found that Noettl’s proffered testimony was nothing more than *ipse dixit*, based on nothing more than his training and experience. *Id.*; *see also, Elcock*, 233 at 750 (finding that testimony of a rehabilitation expert was not reliable under *Daubert* ).

This District has frequently recognized and precluded unreliable proffered testimony of experts under *Daubert* in product liability cases similar to the present case where the defendants’

summary judgment hinges on the admissibility of expert testimony regarding proving a product defect and causation. For instance, in a case with very similar facts, *Booth v. Black & Decker*, 166 F.Supp.2d 215, 216-17 (E.D.Pa. 2001), the plaintiffs brought suit against a toaster manufacturer alleging that an internal defect caused a fire that damaged their home. Plaintiffs' expert concluded that a thermal cut-off device could have easily been incorporated in the toaster, which would have cut the power before being able to overheat. *Booth*, 166 F.Supp.2d at 218. Plaintiffs' expert's opinion was based on his general knowledge of thermal cut-off devices and the fact that he knew some other toaster models did incorporate such a device. *Id.*

The court focused on the fact that plaintiffs' expert: never conducted any tests to determine the maximum temperature that the toaster may reach; never tested his hypothesis by determining whether the toaster could create a fire due to overheating; never attempted to recreate the fire event; did not identify or model the kind of device that he believed should have been incorporated in the toaster; and never installed such a device in an exemplar toaster to test its capacity to prevent the oven from overheating. *Id.* at 218-22. Rather, the expert merely examined the toaster and concluded it could have been safer.

The court excluded the plaintiffs' expert and granted the defendant summary judgment on the bases that the expert "produced no persuasive, objective evidence that this method was subject to peer review, had a known or potential rate of error, could be measured against existing standards, or was generally accepted, as required by Rule 702, *Daubert*, *Kumho Tire*, and *Oddi*." *Id.* at 220; *see also*, *Johnson v. SJP Management, LLC*, 2009 WL 367539, at \*10 - \*14 (E.D.Pa. Feb. 12, 2009) (holding that expert testimony must be excluded because opinions were not "grounded on any testing, observation, or inspection"); *Chester Valley Coach Worlds v. Fisher-Price*, 2001 WL 1160012, at \*13 (E.D.Pa. Aug. 29, 2001) (excluding expert testimony due to the

absence of any generally accepted methodology in support of the expert's conclusions); *Hamilton v. Emerson Elec. Co.*, 133 F.Supp.2d 360, 372 (M.D.Pa. 2001) (rejecting the testimony of an expert who reached the "conclusion that the [miter] saw was defective . . . based only on his authority").

In a similar case from another jurisdiction, *Shafer v. LG Electronics U.S.A., Inc.*, 2010 WL 8757823 (N.D.Tex. Sept. 30, 2010), plaintiffs brought suit against LG alleging that a microwave, model JES738, was defective and caused a residential fire. Plaintiffs' expert's proffered opinion was that the microwave self-started, although the precise mechanism of failure was impossible to determine due to the extent of damage. *Shafer* at \*5. The court found that plaintiffs' expert's opinion was fatally flawed because he never tested an exemplar to determine if self-starting was even possible. *Id.* The court granted summary judgment in favor of LG on the basis that plaintiffs' expert's proffered testimony was unreliable and plaintiffs could not meet their burden of proving defect and causation. *Id.* at 7.

Here, all of the above cases inescapably establish that Booth's proffered opinions, must be precluded as they are based on little, if any, methodology beyond his own intuition. Rather Booth's opinions are based on nothing more than his prior training and experience. Booth's hypothesis is that transient voltage supplied from the local electrical utility, FirstEnergy, over a nearly 2 ½ year period damaged the internal components in the microwave thereby causing one or more of them to fail and create a fire.

Despite readily available data from this utility company showing the exact dates and frequency of transient power provided to the Boicu's residence, Booth admits that he did not complete this overvoltage analysis. Exhibit "C", pp. 159-60. Instead, he relies (apparently solely by memory as opposed to even looking at them) on unrelated analyses, studies and

testimony related to FirstEnergy's electrical distribution system issues in the Mid-Atlantic region. Exhibit "C", pp. 155-60. This is classic inadmissible *ipse dixit* under *Daubert* and its progeny.

After an examination of the subject microwave, Booth cannot identify any particular component that failed due to the extent of damage within the microwave. He then concedes that there may be any array of potential origins of the malfunction ("we actually don't know the scientific analysis that says here's the precise problem"), but then arrives at the hypothesis that transient voltage could have created a malfunction solely based on his prior experience and knowledge. At this point, Booth is obligated to present some type of objective evidence or testing to establish the validity and reliability of his hypothesis – but he fails to even attempt to do so.<sup>16</sup> Booth admits that he did not test the exemplar power cords or exemplar microwaves in any manner whatsoever.

Moreover, Booth's opinions are not based on any generally accepted texts, treatises or objective information. Booth repeatedly refers to misleading and irrelevant industry standards, such as ASTM Standard F1360-06, UL 923 (Seventh Ed.), and various IEEE standards that have no application to the subject residential microwave. See, *supra*, pp. 11-13. He also relies upon non-scientifically reliable CPSC complaints that are, by his own admission, unsubstantiated and unverified. See, *supra*, pp. 15-16.

Accordingly, for the same reasons set forth in *Oddi*, *Booth*, *Chester Valley*, *Hamilton*, *Shafer*, and *Maldonado*, Booth's testimony must be precluded as inadmissible and unreliable under *Daubert* and Fed.R.Evid. 702.

---

<sup>16</sup> See, *Chester Valley*, 2001 WL 1160012 \* 11, n. 16 (discussing requirements under NFPA 921 § 18-4.5 and 18.4.6 (1998 version) that "if ignition scenario requires the failure of malfunction of one or more appliance components, this can also be tested on the exemplar.").



**ii. Booth's Proffered Opinion is Misleading, Too Broad and Is Not Helpful to the Jury.**

Under Red.R.Evid. 702, an "expert's testimony must be relevant for the purposes of the case and must assist the trier of fact," *Schneider*, 320 F.3d at 404; in other words, the testimony "must fit the issues in the case." *Id.* "[E]ven if an expert's proposed testimony constitutes scientific knowledge, his or her testimony will be excluded if it is not scientific knowledge *for purposes of the case.*" *Paoli*, 35 F.3d at 743 (emphasis in original). To determine if evidence meets this "fit" requirement, a court "must examine the expert's conclusions in order to determine whether they could reliably follow from the facts known to the expert and the methodology used." *Heller v. Shaw Indust., Inc.*, 167 F.3d 146, 153 (3d Cir. 1999).

Here, Booth's opinion that LG should have designed and incorporated a power surge protection device into the microwave is simply too broad and creates an unrealistic and unduly burdensome residential appliance and electronics industry-wide standard. Significantly, Booth's theory can easily and unjustly be extrapolated to recover damages related to any residential appliance or electronic products, including but not limited to: televisions, home entertainment systems, computers, printers, faxes, phones, microwaves, dishwashers, toasters, washers and dryers that sustain any type of internal component failure irrespective of the actual mechanism of failure or the value of damages. While surge protection may make a product ultimately safer - its absence does not make it *de facto* defective. Booth cannot refer to any literature, treatise or generally accepted texts that support such an overly broad sweeping theory.

Moreover, there is an entire industry that designs and manufactures all types of surge protection devices external to residential products that can be placed at numerous locations

downstream of the electrical meter to minimize the effect of power disturbances.<sup>17</sup> For instance, when a consumer buys a computer, the salesman typically recommends the purchase of a power strip to protect against surges, spikes or transient voltage. While surge protection throughout a home's electrical system external to the products themselves may be a safe practice, Booth's theory that the surge protection should be confined to the product itself does not assist the jury in determining whether the microwave was defective and caused the fire. After all, the true source of Booth's "defect theory" is the electric utility's power quality, which is a separate and distinct issue aside from the microwave at issue. Booth did not investigate or evaluate potentially unreasonably dangerous and defective voltage disturbances, which he seems to believe damaged the microwave, over a nearly 2 ½ year period caused by the negligence or product liability issues related to the local electrical utility or third-parties somehow affecting the power supply.

Accordingly, Booth's proffered opinions do not "fit" the facts of this case and are too broad to assist the jury. "A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." *General Elec. v. Joiner*, 522 U.S. 136, 146, 118 S. Ct. 512, 139 L.Ed.2d 508 (1997).

**iii. In Light of Booth's Unreliable and Inadmissible Testimony, LG is Entitled to Summary Judgment**

To recover on a theory of strict liability under § 402A, generally, a plaintiff must establish: (1) that the product was defective; (2) that the defect was a proximate cause of the plaintiff's injuries; and (3) that the defect causing the injury existed at the time the product left

---

<sup>17</sup> For example, PECO's Rule 12.1 of their Public Utility Tariff acknowledges that while its transient voltage, caused by lightening or other problems, may damage computers, electronic equipment and appliances, "[a] variety of protective devices and alternate power supplies that may prevent or limit such damage are available for purchase by the customer from third parties." *State Farm Fire & Cas. Co. v. PECO*, 54 A.3d 921, 924 (Pa. Super. 2012)

the seller's hands. *See, Pavlik v. Lane Limited/Tobacco Exporters Int'l*, 135 F.3d 876, 881 (3d Cir. 1998); *Davis v. Berwind Corp.*, 547 Pa. 260, 267, 690 A.2d 186 (1997). Thus, to succeed on a product liability claim, plaintiffs must show that there was a defect, and that defect was the cause of the fire.

Booth proffers the opinions that the subject microwave was defectively designed due to the absence of a surge protection device, and the absence of such a device caused the fire. For the reasons set forth above, Booth's proffered opinions are inadmissible and unreliable under Fed.R.Evid. 702 and *Daubert*. Without Booth's testimony, Plaintiff cannot present any evidence to create a genuine issue of material fact as to whether the microwave was defective, and whether that defect caused the fire.

"Although expert evidence is generally required in a products liability case where a defect is alleged, [the Third Circuit has] never foreclosed the possibility that a defective condition may be established through non-expert evidence." *Oddi*, 234 F.3d 136, 159 (3d Cir. 2000); *Padillas v. Stork-Gamco, Inc.*, 186 F.3d 412 (3d Cir.1999). However, to overcome the lack of expert testimony in a products liability case, the primary facts must be comprehensible to the average juror. *Id.* Thus, because an absence of expert testimony is not fatal to a products liability case, the proper analysis is whether the asserted defect is obvious enough to be ascertainable by the average juror without speculation.

For example, in *Oddi*, the court granted summary judgment to the defendant because it found that a juror could not look at a bread truck and reasonably conclude whether its bumper was defective without expert testimony. *Oddi*, 234 F.3d at 159–60. On the other hand, in *Padillas*, the court found that a juror could look at a chicken cutter with exposed blades and


determine whether it was defective for not having a guard to cover the blades. *Padillas*, 186 F.3d at 415-16.

The instant case is analogous to *Oddi*, as an average juror is unable to look at a microwave and reasonably conclude whether it was defective, and that the defect was the cause of the fire, without expert testimony. Accordingly, upon the determination that Booth's proffered testimony is inadmissible and unreliable under Fed.R.Evid. 702 and *Daubert*, LG is entitled to summary judgment.

#### IV. CONCLUSION

For the above stated reasons, LG Electronics, Inc. respectfully requests that this Honorable Court enter the proposed Order attached hereto precluding Plaintiff's expert, Gregory L. Booth, P.E.'s testimony under Fed.R.Evid. 702 and *Daubert* and further granting summary judgment in favor of LG and against any and all claims asserted against LG by any party.

**WEBER GALLAGHER SIMPSON  
STAPLETON FIRES & NEWBY, LLP**

By:   
\_\_\_\_\_  
Brian L. Calistri, Esquire  
Dean C. Seman, Esquire  
*Attorney for Defendants*  
*LG Electronics, Inc.*

Dated: April 24, 2014